036-21346-001 Rev. A (202)

YORK
Heating and Air Conditioning

TECHNICAL GUIDE

50 Hz SINGLE PACKAGE ELECTRIC / ELECTRIC AIR-COOLED AIR CONDITIONER

MODELS:

PAC036 THRU 060
(3 THRU 5 NOMINAL TONS, 3 PHASE)

DESCRIPTION

These units are designed for outdoor installation and offer electric cooling with an electric heat option for field installation. Only utility and duct connections are required at the point of installation.

FEATURES

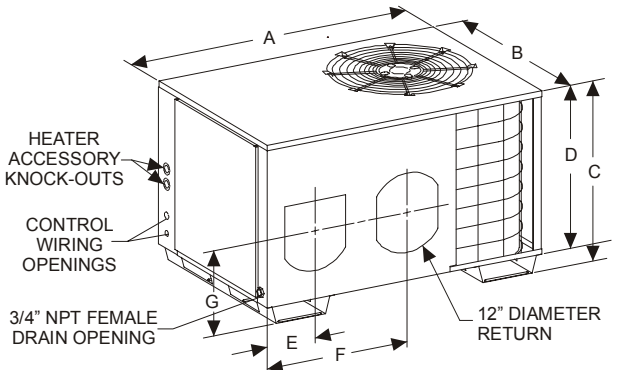
- **DURABLE CONSTRUCTION -** The outdoor unit is constructed of pre-painted galvanized steel that offers tough protection against corrosion and resists fading when exposed to sunlight. Drain holes are incorporated into the base pan to permit free drainage of moisture.
- **RELIABILITY -** The compressor is internally protected against both high pressure and high temperature. Each is equipped with an internal pressure relief valve and internal line break overload protection. In addition there is a factory fitted filter drier.
- **QUALITY COILS -** The outdoor coil is constructed of copper tube and hardened black coated aluminum fins for durability and long lasting efficient operation. A factory fitted coil guard provides additional protection.
- **LOWER INSTALLED COST -** Installation time and costs are reduced by easy utility connections. The small base dimensions mean less space is required on the ground or roof.
- **TOP DISCHARGE** -The warm condenser air is directed up and away from the structure and any landscaping.
- **LOW OPERATING SOUND LEVEL -** In addition to having a insulated blower compartment, the compressor is mounted on neoprene isolators to reduce operating sounds.
- **LOW MAINTENANCE -** Long-life, permanently lubricated motor bearings need no annual servicing.

FOR DISTRIBUTION USE ONLY - NOT TO BE USED AT POINT OF RETAIL SALE

Physical and Electrical Data

MODEL			036H1081A	048H1081A	060H1081A
Unit Supply Voltage			380/415 - 3 - 50		
Normal Voltage Range [1]			342 - 455		
Minimum Circuit Ampacity			12.4	14.8	16.8
Max. Overcurrent Device Amps [2]			15	20	25
Compressor Type [3]			Recip	Recip	Recip
Compressor Amps		Rated Load	6.1	8.0	9.6
		Locked Rotor	39.0	53.0	79.0
Crankcase Heater			No	No	No
Fan Motor Amps		Rated Load	1.8	1.8	1.8
Fan Diameter Inches			18“	20”	20”
Fan Motor		Rated HP	1/3	1/3	1/3
		Nominal RPM	1,100	1,100	1,100
		Nominal CFM	2,300	3,000	3,000
Condenser Coil Data		Face Area Sq. Ft.	9.25	11.24	11.24
		Rows Deep	1	2	2
		Fin / Inches	18	15	15
		Tubing Diameter	3/8	3/8	3/8
Evaporator Coil Data		Face Area Sq. Ft.	3.61	4.67	4.67
		Rows Deep	3	4	4
		Fin / Inches	14	12	12
		Tubing Diameter	5/16	5/16	5/16
Blower Data	Motor HP / RPM		3/4 / 1,000	3/4 / 1,050	3/4 / 1,100
	Max. Static Pressure In. Water		.80	.80	.80
	Dia. x Width (in.) / Rated CFM		10 x 7/1,200	10 x 7/1,500	10 x 7/1,600
	Motor Full Load AMPS		3.0	3.0	3.0
Shipping Weight (lbs.)			270	354	360
Unit Charge (Lbs. - Oz.)			4-4	7-0	7-10
Minimum Wire Size [4]			#14 (0-80 ft.)	#14 (0-60 ft.)	#12 (0-60 ft.)
75º C Copper @ 400 Volt			#12 (81-130 ft.)	#12 (61-90 ft.)	#10 (61-100 ft.)

1. Rated in accordance with ARI Standard 110, utilization range “A”.
2. Dual element fuses or HACR circuit breaker.
3. Rated under standard A.R.I. conditions of 80º DB/67º WB indoor, 95º outdoor.
4. Other temperature ratings of wire will have different rated ampacities. Refer to NEC for proper wire sizing recommendations. If using type NM or NM-B cable, wires must be sized to 60º C ampacities per NEC Article 336, Section 26. NEC and Local Codes superced any wire recommendations made in these specifications.



All dimensions are in inches. They are subject to change without notice. Certified dimensions will be provided upon request.

UNIT DIMENSIONS (INCHES)							
UNIT	A	B	C	D	E	F	G
036	44	30	26 5/8	24 1/8	7 3/4	22 1/2	12 5/8
048	46	32	28 5/8	26 1/8	7 3/4	22 1/8	12 5/8
060	46	32	28 5/8	26 1/8	7 3/4	22 1/8	12 5/8

CAPACITY & PERFORMANCE DATA

UNIT MODEL NUMBER	COOLING CAPACITY 95°F	UNIT CHARGE WEIGHT HCFC-22	RATED CFM	SENSIBLE TOTAL RATIO	SOUND RATING
PAC036H1081A	33,000	3.7 Lbs.	1,200	0.74	8.4
PAC048H1081A	47,000	7.0 Lbs.	1,500	0.68	8.4
PAC060H1081A	55,000	7.6 Lbs.	1,600	0.65	8.4

BLOWER PERFORMANCE DATA

UNIT SPEED	STATIC PRESSURE							
PAC036H1081A PAC048H1081A PAC060H1081A	.1	.2	.3	.4	.5	.6	.7	.8
1837	1781	1720	1672	1607	1534	1443	1352	1243
1489	1468	1441	1412	1378	1336	1279	1204	1120
1238	1228	1216	1207	1180	1138	1088	1024	938

COMPRESSOR DATA

UNIT MODEL	PAC036H1081A	PAC048H1081A	PAC060H1081A
MANUFACTURER	Bristol	Bristol	Bristol
COMPRESSOR MODEL	H23A383DBEA	H23A543DBEA	H26A68QDBEA
RPM (50 Hz)	3,000	3,000	3,000
RATED LOAD AMPS	6.1	8.0	9.6
LOCK ROTOR AMPS	39.0	53.0	79.0
BRANCH CIRCUIT SELECTION CURRENT (BCSC)	6.1	8.0	9.6

ELECTRICAL DATA - Packaged A/C (No Electric Heat)

MODEL		PAC036H1081A	PAC048H1081A	PAC060H1081A
Power Supply Volts / Phase / Hertz		380--415 / 3 / 50		
Maximum Fuse Size (Amp)		15	20	20
Maximum Circuit Breaker Size (Amp)		15	20	25
Min. Wire Size (AWG) Copper **(75°C) Size -- Ft.**		#14--0--80 #12--81--130	#14--0--60 #12--61--90	#12--0--60 #10--61--100
Total Input @ Rated Conditions	Running Amps	7.4	10.2	11.3
	Running Watts	4,050	5,870	6,650

CONDENSER COIL DATA

MODEL	PAC036H1081A	PAC048H1081A	PAC060H1081A
Face Area, Sq. Ft.	9.25	11.24	11.24
Tube Diameter Inches	3/8	3/8	3/8
Rows Deep	1	2	2
Fins / Inch	18	15	15

CONDENSER FAN DATA

MODEL	PAC036H1081A	PAC048H1081A	PAC060H1081A
RPM	1,100	1,100	1,100
HP	1/3	1/3	1/3
Nameplate FLA	1.8	1.8	1.8
Dia. / No. Blades	18 / 3	20 / 4	20 / 4
CFM @ 0 S.P.	2,300	3,000	3,000

EVAPORATOR COIL DATA

MODEL	PAC036H1081A	PAC048H1081A	PAC060H1081A
Face Area (Sq. Ft.)	3.61	4.67	4.67
Tube Dia. Ins.	5/16	5/16	3/8
Rows Deep	3	4	4
Fins / Inch	14	12	12
Orifice	.071	.079	.081

EVAPORATOR BLOWER DATA

MODEL	PAC036H1081A	PAC048H1081A	PAC060H1081A
Motor HP -- RPM	3/4 -- 1,000	3/4 -- 1,050	3/4 -- 1,100
Static Pressure (Inches Water)	.5	.5	.5
Blower Wheel Dia. x Width Rated CFM	10 x 7 1,200	10 x 7 1,500	10 x 7 1,600
Nameplate FLA	3.0	3.0	3.0

ELECTRICAL DATA - for Heat Packages Only

HEATER NUMBER			7642-8051 (5.0 KW)	7642-8101 (10.0 KW)	7642-8151 (15.0 KW)
Heater Branch Circuit Electrical Service			2 Leads + 1 Ground	2 Leads + 1 Ground	2 Leads + 1 Ground
Output Capacity	415 VAC	CAPACITY	17,000	34,100	51,1000
		KW	5.0	10.0	15.0
	380 VAC	CAPACITY	15,600	31,200	46,800
		KW	4.6	9.2	13.7
Circuit Number			1	1	1
Nominal Circuit Load - Amps			12.1	24.1	36.2
Heater Circuit Maximum Fuse Size			20	35	45
Minimum Circuit Ampacity			15.9	27.9	40.0
Maximum wire Size (60° C) CU		0 - 50 Ft.	12	10	8
		51 - 100 Ft.	10	8	6

FIELD INSTALLED ACCESSORIES

Refer to price manual for specific model numbers:
Start Assist Kit, Time Delay Kit, Electric Heater Kit and Wall Thermostat.

Electric Heater Kit - Available in 3 different Kw capacities (5, 10, 15 Kw).

Wall Thermostat - The units are designed to operate with 24-volt electronic and electric-mechanical thermostats.

COOLING PERFORMANCE DATA

Unit Model Number		PAC036H1081A														
INDOOR AIR		AMBIENT TEMPERATURE ENTERING CONDENSING COIL														
		85º			95º			105º			115º			125º		
		CAPACITY MBTUH			CAPACITY MBTUH			CAPACITY MBTUH			CAPACITY MBTUH			CAPACITY MBTUH		
Indoor CFM	Indoor DB/WB	T.C.	S.C.	KW	T.C.	S.C.	KW	T.C.	S.C.	KW	T.C.	S.C.	KW	T.C.	S.C.	KW
1000	85/71	37.6	24.5	3.91	35.2	22.4	4.14	32.3	21.1	4.34	29.3	19.7	4.53	26.4	18.4	4.73
	80/67	35.3	23.6	3.87	33.1	23.2	4.10	29.0	20.8	4.25	24.9	18.5	4.41	20.8	16.2	4.57
	75/63	32.4	22.4	3.80	30.3	21.2	4.03	26.3	19.1	4.14	22.2	17.0	4.25	18.1	14.9	4.36
1345	85/71	38.3	25.9	4.02	35.9	25.1	4.25	33.1	23.4	4.46	30.3	21.6	4.66	25.0	20.1	4.86
	80/67	36.2	25.0	3.89	32.6	24.1	4.05	30.1	22.2	4.29	25.8	21.7	4.50	19.8	19.0	4.50
	75/63	33.4	23.8	3.82	29.6	23.1	3.98	27.1	20.4	4.17	22.1	20.1	4.36	16.9	16.0	4.42
1400	85/71	39.3	27.4	4.12	37.0	26.4	4.35	34.2	25.0	4.57	31.3	23.5	4.79	28.5	22.1	5.01
	80/67	37.2	26.1	4.05	35.0	24.5	4.28	31.3	23.4	4.46	27.5	22.2	4.64	23.7	21.0	4.82
	75/63	34.5	25.1	3.98	32.5	22.8	4.20	27.9	21.7	4.34	23.3	20.7	4.47	18.7	19.7	4.60

Unit Model Number		PAC048H1081A														
INDOOR AIR		AMBIENT TEMPERATURE ENTERING CONDENSING COIL														
		85º			95º			105º			115º			125º		
		CAPACITY MBTUH			CAPACITY MBTUH			CAPACITY MBTUH			CAPACITY MBTUH			CAPACITY MBTUH		
Indoor CFM	Indoor DB/WB	T.C.	S.C.	KW	T.C.	S.C.	KW	T.C.	S.C.	KW	T.C.	S.C.	KW	T.C.	S.C.	KW
1300	85/71	51.6	31.8	5.44	48.7	30.5	5.79	45.9	29.1	6.13	43.0	27.8	6.47	40.2	26.5	6.81
	80/67	48.3	30.9	5.38	45.1	29.3	5.69	41.9	27.6	6.00	38.7	26.0	6.31	35.5	24.4	6.62
	75/63	44.7	30.1	5.26	40.9	28.1	5.54	37.0	26.1	5.81	33.2	24.1	6.08	29.4	22.1	6.35
1500	85/71	52.6	33.3	5.56	49.9	32.0	5.92	47.2	30.8	6.27	44.5	29.5	6.63	41.7	28.2	6.99
	80/67	49.1	32.5	5.50	47.1	31.4	5.82	43.0	29.6	6.14	36.6	28.2	6.47	31.1	27.1	6.79
	75/63	45.6	31.7	5.38	42.3	30.8	5.66	38.1	27.9	5.94	32.4	25.8	6.22	26.0	24.6	6.50
1700	85/71	53.6	34.8	5.68	51.1	33.6	6.05	48.5	32.4	6.42	45.9	31.2	6.79	43.3	30.0	7.16
	80/67	49.9	34.1	5.62	47.0	32.9	5.95	44.0	31.6	6.29	41.1	30.3	6.62	38.2	29.0	6.96
	75/63	46.4	33.3	5.51	42.8	31.5	5.79	39.1	29.7	6.08	35.4	27.9	6.36	31.7	26.1	6.65

Unit Model Number		PAC060H1081A														
INDOOR AIR		AMBIENT TEMPERATURE ENTERING CONDENSING COIL														
		85º			95º			105º			115º			125º		
		CAPACITY MBTUH			CAPACITY MBTUH			CAPACITY MBTUH			CAPACITY MBTUH			CAPACITY MBTUH		
Indoor CFM	Indoor DB/WB	T.C.	S.C.	KW	T.C.	S.C.	KW	T.C.	S.C.	KW	T.C.	S.C.	KW	T.C.	S.C.	KW
1500	85/71	59.6	37.4	6.25	55.8	35.5	6.62	51.9	33.7	6.98	48.0	31.8	7.35	44.1	30.0	7.72
	80/67	55.5	36.5	6.13	51.2	34.3	6.49	46.9	32.2	6.84	42.6	30.0	7.19	38.3	27.9	7.54
	75/63	50.4	34.9	6.02	46.2	32.7	6.36	41.9	30.4	6.69	37.6	28.1	7.03	33.3	25.8	7.37
1560	85/71	60.3	38.6	6.32	56.5	36.9	6.70	52.6	35.1	7.07	48.8	33.3	7.44	44.9	31.5	7.81
	80/67	56.0	37.8	6.21	55.9	37.0	6.56	47.4	33.5	6.91	47.2	33.1	7.27	40.6	31.1	7.62
	75/63	53.3	36.3	6.10	52.7	35.9	6.44	42.6	31.6	6.78	42.0	31.4	7.12	33.5	25.9	7.46
1700	85/71	61.0	39.9	6.40	57.2	38.2	6.78	53.3	36.5	7.15	49.5	34.8	7.53	45.7	33.1	7.91
	80/67	56.4	39.1	6.28	52.2	37.0	6.64	47.9	34.8	6.99	43.6	32.6	7.34	39.3	30.4	7.69
	75/63	52.2	37.8	6.18	47.7	35.3	6.53	43.3	32.9	6.87	38.8	30.4	7.21	34.4	28.0	7.55

NOTE: ALL CAPACITIES ARE NET WITH INDOOR FAN HEAT ALREADY DEDUCTED AT 1250 BTUH/1000 CFM.
KW RATING IS FOR OUTDOOR UNIT ONLY.

NOTES

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Supersedes: T-734 Rev. 3, 530.10-TG2YI (899)

Unitary Products Group

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